

| Ref # | Hits | Search Query  | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|---|---|------------------|---------|------------------|
| S1    | 150  | jedec adj2 tray   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/21 20:34 |
| S2    | 8    | leveling and (Kiyokawa or Bahnck) or ("6135291" and canella)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/11 13:30 |
| S3    | 6    | ("4556362" or "5966903" or "6135291").pn.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/12 10:24 |
| S4    | 4    | vitronics and flip same (substrate or component or package)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/12 10:30 |
| S5    | 10   | vanguard and flip same (substrate or component or package)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/12 11:21 |
| S6    | 362  | (flip or invert) same (substrate or component or package) and (\$2ball\$2grid\$2)                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/12 13:42 |
| S7    | 2764 | (flip\$3 or invert\$3 or pick\$3) same (substrate or component or package) same vacuum and (tray or holder or pocket) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/21 21:58 |
| S8    | 764  | S7 and (probe or needle or anvil)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR               | ON      | 2006/01/12 13:45 |
| S9    | 5    | ("20030205799"   "5200366"   "5918746"   "6038136"   "6752204").PN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2006/01/12 13:50 |
| S10   | 14   | ("3766439"   "4330790"   "4562924"   "4617605"   "4928206").PN. OR ("5343363").URPN.                                  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2006/01/12 15:08 |
| S11   | 18   | ("4298120"   "4406367"   "4411362"   "4489487").PN. OR ("4562924").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2006/01/12 15:10 |
| S12   | 39   | ("4406367"   "4411362"   "4562924"   "4657137").PN. OR ("4966281").URPN.  | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR               | ON      | 2006/01/12 15:11 |

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| S13 | 43  | ("20010032800"   "20020014465"   "4382024"   "4395362"   "4667944"   "4711014"   "4746574"   "4778326"   "4800126"   "4966281"   "5075038"   "5089314"   "5104581"   "5106538"   "5106540"   "5171796"   "5173524"   "5183969"   "5208103"   "5240753"   "5304418"   "5346765"   "5441809"   "5547082"   "5609969"   "5654369"   "5682731"   "5685885"   "5739193"   "5769237"   "5783294"   "5791486"   "5807507"   "5833073"   "5910560"   "5914191"   "5922453"   "6021904"   "6096163"   "6150446"   "6230896"   "6290274"   "6357595").PN. OR ("6926937").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/12 15:24 |
| S14 | 68  | ("1198402"   "3158381"   "3190460"   "3465874"   "3520055"   "3562057"   "3652075"   "3707760"   "3809050"   "3920121"   "4221356"   "4285430"   "4395451"   "4410168"   "4428815").PN. OR ("4778326").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/12 15:25 |
| S15 | 12  | ("4667402"   "4850780"   "4859269"   "5270260"   "5343363"   "5411921"   "5524765"   "5589029"   "6201306"   "6204092"   "6555418"   "6589809").PN. OR ("6889427").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/12 15:49 |
| S16 | 944 | 29/743.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 15:30 |
| S17 | 4   | ("4556362"   "5966903"   "6019564"   "6135291").PN. OR ("6871394").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/18 15:33 |
| S18 | 28  | ("3432049"   "3561618"   "4375126"   "4389272"   "4606117"   "4666358"   "4808291"   "4869801"   "4898507"   "4907701"   "5085312"   "5404894"   "5405230"   "5407314"   "5549444"   "5556248"   "5588797"   "5609463"   "5612068").PN. OR ("6019564").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/18 15:33 |
| S19 | 13  | ("3940908"   "4044937"   "4423815"   "4556362"   "4915565"   "4958982"   "4978253"   "5394973"   "5888127"   "5988065"   "6006890"   "6019564"   "6283693").PN. OR ("6551048").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/18 15:53 |
| S20 | 0   | 29/dig44.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/18 15:53 |
| S21 | 0   | 29/dig45.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/18 15:54 |
| S22 | 0   | 29/dig44.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/18 17:24 |
| S23 | 638 | 228/49.1.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/19 14:30 |
| S24 | 217 | 228/49.2.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/19 14:30 |
| S25 | 2   | "US 6871394 B2"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/21 20:34 |

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| S26 | 4      | ("4556362"   "5966903"   "6019564"   "6135291").PN. OR ("6871394").URPN.   | US-PGPUB; USPAT; USOCR                             | OR | ON | 2006/01/21 20:34 |
| S27 | 2      | "us 5492223"   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/21 21:31 |
| S28 | 75468  | ((pin or probe or protrude\$5 or needle or anvil) near10 (plate or tray or lift or lifter or extractor or extratction)) same (tray or holder or pocket or carrier or depression)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/23 12:41 |
| S29 | 108827 | (flip\$4 or invert\$3 or ((obverse or top or bottom or other) near2 side)) near10 (chip or substrate or component or package or die or dice)   | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/23 09:30 |
| S30 | 26     | 414/223.02,226.04.ccls.  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/23 09:31 |
| S31 | 1368   | S28 and S29  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/23 09:38 |
| S32 | 23     | ("2355643"   "3191791"   "3518752"   "4335989"   "4661033"   "4818383"   "4944651"   "5203452"   "5335771"   "5400904"   "5418692"   "5481438"   "5492223"   "5551572"   "5636745"   "5848702"   "5890599"   "6139243").PN. OR ("6375408").URPN.   | US-PGPUB; USPAT; USOCR                             | OR | ON | 2006/01/23 10:11 |
| S33 | 8      | ("5203454"   "5246129"   "5392932"   "5407068"   "5450959"   "5492223"   "5551572"   "5636745").PN.  | US-PGPUB; USPAT; USOCR                             | OR | ON | 2006/01/23 10:39 |
| S34 | 100    | ("0065896"   "0066492"   "0105901"   "0213772"   "0220390"   "0227633"   "0319954"   "0452994"   "0909939"   "1027079"   "1081701"   "1156459"   "1464967"   "1520227"   "1538367"   "1767553"   "1829689"   "1850131"   "1935901"   "1952612"   "1967040"   "1982820"   "2078488"   "2109965"   "2134908"   "2199201"   "2226844"   "2593566"   "3143059"   "3311231"   "3381873"   "3628818"   "3745973"   "3848564"   "3988834"   "4181745"   "4370941"   "4371555"   "4419103"   "4531575"   "4573586"   "4664925"   "4693205"   "4798133"   "4798162"   "4853240"   "4967687"   "5063871"   "5074239"   "5164009"   "5348766"   "5565229"   "D144441"   "D154910"   "D160375"   "D168879"   "D178858"   "D179668"   "D363496"   "D363497").PN. OR ("5895679").URPN. | US-PGPUB; USPAT; USOCR                             | OR | ON | 2006/01/23 10:51 |
| S35 | 33     | ("3414962"   "3641666"   "3653411"   "4109788"   "4381321"   "4393808"   "4395184"   "4406373"   "4502094"   "4526129"   "4598821"   "4669416"   "4788931"   "4847991"   "4859498"   "4903393"   "4920915"   "4928821"   "4953283"   "4970781"   "5007534").PN. OR ("5337893").URPN.   | US-PGPUB; USPAT; USOCR                             | OR | ON | 2006/01/23 11:10 |
| S36 | 182918 | S28 or S29 not (S30 or S31 or S32 or S33 or S34 or S35)  | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/01/23 12:38 |

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| S37 | 9125586 | (pin or probe or protrude\$5 or needle or anvil) near S32 (push\$3 or force\$3 or align\$3 or raise\$3 or elevate\$3 or level\$3 or extract\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 12:40 |
| S38 | 9141    | ((pin or probe or protrude\$5 or needle or anvil) near4 (push\$3 or force\$3 or align\$3 or raise\$3 or elevate\$3 or level\$3 or extract\$3)) near4 (tray or holder or pocket or carrier or depression)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 12:43 |
| S39 | 3110    | S38 and S36  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 12:44 |
| S40 | 38135   | (vacuum or suction) adj3 (cup or pad)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 12:44 |
| S41 | 25927   | S40 and S37  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 12:45 |
| S42 | 73      | S39 and S41  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 13:15 |
| S43 | 693     | (S39 or S41) and solder  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 13:15 |
| S44 | 1162    | (S39 or S41) and solder\$3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 13:16 |
| S45 | 63      | ("3320658"   "3719981"   "4056302"   "4097266"   "4175821"   "4462534"   "4701133"   "5055971"   "5098311"   "5299939"   "5306171"   "5324569"   "5346118"   "5355283"   "5400904"   "5406701"   "5409157"   "5435482"   "5442852"   "5477933"   "5491303"   "5576519"   "5593322"   "5615477"   "5653598"   "5691041"   "5702255"   "5730606"   "5772451"   "5873162"   "5876219"   "5893763"   "5899760"   "5910023"   "6024584"   "6041495"   "6042389"   "6079991"   "6093035"   "6093042"   "6095832"   "6116923"   "6155848"   "6155860"   "6164983"   "6183268"   "6193537"   "6241535"   "6264490"   "6284984"   "6313999"   "6325644"   "6330164"   "6336823"   "6375474"   "6394822"   "6471526"   "6478588"   "6494725"   "6527597"   "6558174"   "6561819").PN. OR ("6860741").URPN. | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/23 13:38 |

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|-----|-----|--|---|----|----|------------------|
| S46 | 125 | (US-20020030086-\$ or US-20020092886-\$ or US-20030154597-\$ or US-20030201549-\$ or US-20040129452-\$ or US-20040149804-\$ or US-20040206800-\$ or US-20030140476-\$ or US-20040261257-\$ or US-20030017663-\$ or US-20020166886-\$ or US-20020109518-\$ or US-20020093080-\$).did. or (US-3057056-\$ or US-3252192-\$ or US-3720309-\$ or US-3898714-\$ or US-3937386-\$ or US-4135630-\$ or US-4235014-\$ or US-4404741-\$ or US-4562924-\$ or US-4611397-\$ or US-4611743-\$ or US-4657137-\$ or US-4778326-\$ or US-4790921-\$ or US-4859269-\$ or US-5082681-\$ or US-5177528-\$ or US-5186328-\$ or US-5199564-\$ or US-5234104-\$ or US-5303824-\$ or US-5343363-\$ or US-5381937-\$ or US-5482198-\$ or US-5492223-\$ or US-5518120-\$).did. or (US-5547082-\$ or US-5791486-\$ or US-5895554-\$ or US-5979739-\$ or US-6003676-\$ or US-6024526-\$ or US-6029427-\$ or US-6055328-\$ or US-6111417-\$ or US-6129257-\$ or US-6139403-\$ or US-6146912-\$ or US-6176373-\$ or US-6202292-\$ or US-6204092-\$ or US-6209532-\$ or US-6213376-\$ or US-6230896-\$ or US-6282812-\$ or US-6284554-\$ or US-6302313-\$ or US-6347037-\$ or US-6364196-\$ or US-6383303-\$ or US-6391683-\$ or US-6412685-\$ or US-6425709-\$).did. or (US-6448801-\$ or US-6484927-\$ or US-6505397-\$ or US-6551048-\$ or US-6560117-\$ or US-6561743-\$ or US-6747464-\$ or US-6844216-\$ or US-6869264-\$ or US-6871394-\$ or US-6887330-\$ or US-6889427-\$ or US-6915943-\$ or US-6926937-\$ or US-4208159-\$ or US-4556362-\$ or US-6171049-\$ or US-6517691-\$ or US-5613611-\$ or US-6484881-\$ or US-6474477-\$ or US-6446692-\$ or US-6423966-\$ or US-6375408-\$ or US-6139243-\$ or US-6331225-\$ or US-6205745-\$).did. or (US-5966903-\$ or US-5909839-\$ or US-5807066-\$ or US-5361914-\$ or US-5337893-\$ or US-6215098-\$ or US-5785484-\$ or US-4903393-\$ or US-4472218-\$ or US-3918146-\$ or US-6492187-\$ or US-5409368-\$ or US-3932087-\$ or US-3805478-\$ or US-6887723-\$ or US-6869008-\$ or US-6581278-\$ or US-6474476-\$ or US-6213386-\$ or US-4799617-\$ or US-4796560-\$ or US-4549200-\$).did. or (US-3288088-\$ or US-2355643-\$ or US-3191791-\$).did. or (US-4556362-\$ or US-5966903-\$ or US-6135291-\$ or US-6590285-\$ or US-6829149-\$ or US-20040261257-\$ or US-20030140476-\$).did. | US-PGPUB;<br>USPAT;<br>USOCR;<br>DERWENT                          | OR | ON | 2006/01/23 15:41 |
| S47 | 3   | S46 and "6019564"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/01/23 15:41 |
| S48 | 13  | ("3940908"   "4044937"   "4423815"   "4556362"   "4915565"   "4958982"   "4978253"   "5394973"   "5888127"   "5988065"   "6006890"   "6019564"   "6283693").PN. OR ("6551048").<br>URPN.   | US-PGPUB;<br>USPAT;<br>USOCR                                      | OR | ON | 2006/01/23 15:42 |